

# High School to College and Career Pathway: Post-Secondary

Area of Study: Technology & Engineering Educ.

Pathway: Pre-Engineering

Region: Wasatch Front	District:	School:	<b>College/Institution: Salt Lake Community College</b> Articulation Agreement in place? Yes <b>Name of Degree or Certificate: Civil/Environmental Engineering, Associate of Pre-Engineering Transfer Degree</b>
Contact Person: Don Johnson		Ph.#: 801 957-5807	
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High School				College		
Course Number	High School Suggested Academic Courses	H.S. Credit	College Credits	Course Number	College General Education Requirements	College Credits
	ENGL 1010*	1	3	ENGL 1010	Introduction to Writing	3
				ENGL 2010	Intermediate Writing 04 ENGL 2100 Technical Writing (3)	3
	Calculus Elective Concurrent Enrollment*	1	4	MATH 1210	Calculus I	4
	HIST 1700 American Civilization*	1	3	HIST 1700	<b>Amer Civ or ECON 1740 Econ Hist or POLS 1100 US Gov</b>	3
	6 credits from 2 distribution areas: Fine Arts 3, Humanities 3, Social Science 3*	2	6		6 credits from 2 distribution areas: Fine Arts 3, Humanities 3, Social Science 3	6

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High School				College		
Course CIP #	CTE Pathway Courses (4 credits for completion)	H.S. Credit	College Credits	Course #	College Major Course Requirements	College Credits
<b>Course #</b>	<b>Foundation Courses: (2.5 required)</b>	<b>Credit</b>				
21.0122	Principles of Engineering	1.00				
21.0120	Engineering Design, Introduction	1.00				
21.0121	Digital Electronics	1.00				
	<i>Choose one of the following courses:</i>					
21.0123	Computer Integrated Manufacturing	1.00				
21.0125	Civil Engineering & Architecture	1.00				
	Aerospace Engineering	1.00				
21.0124	Engineering Design & Development	1.00				
	<b>Elective Courses: (choose 1.5 credits)</b>					
48.0101	Drafting/CAD	1.00				
47.0105	Electronics	1.00				
48.0503	Machine Tool	1.00				
32.0199	Student Internship (Critical Workplce Skills)	.50				
				CEEN1100	Civil Engineering Design	3
				CEEN 2010	Statics	3
				CEEN 2020	Dynamics I	2
				CEEN 2240	Surveying	3
				CEEN 2130	Engineering Economics	4
				CEEN 2140	Strength of Materials I	2
				CEEN 2145	<b>Strength of Materials lab</b>	1
				CEEN 2410	<b>Structural Theory I</b>	3
				CEEN 2300	Engineering Thermodynamics	2
				CS 1050	Engineering Computing or ENGR 1000 & ENGR 1020	3
				EE 2200	Elect Engin for Civil Engin or MSE 2170 Mat Sci for Civil Eng	1.5
				MATH 1220	Calculus II	4
				MATH 2210	Multivariate Calculus	3
				MATH 2250	Differential Equations/Linear Algebra	3
				PHYS 2210	Physics for Science & Engineering I	4

					ELECTIVES (Optional) May be required at some transfer institutions. See advisor. -CEEN 2000 CO-OP Education (1-2) -CEEN 2320 Strength of Materials II (2) -CEEN 2450 Numerical Technology (2) -MEEN 1050 Design & Visual Communications (2)		
	<u>Additional Articulated Classes Below</u>	<u>Credit</u>					
15.1302	CAD Drafting Technology Concurrent Enroll*	1	2	⇒	ARCH 1310	Introduction to AutoCAD	3
	CHEM 1210 Chemistry W/Lab Conc Enrol*	1	4	⇒	CHEM 1210	General Chemistry I	4
	CHEM 1215 Chemistry W/Lab Conc Enrol*		1	⇒	CHEM 1215	General Chemistry Lab I	1
	CHEM 1220 Chemistry W/Lab Conc Enrol*	1	4	⇒	CHEM 1220	<b>General Chemistry II or PHYS 2220 Phys for Sci &amp; Eng II</b>	4
	CHEM 1225 Chemistry W/Lab Conc Enrol*		1	⇒	CHEM 1225	General Chem II Lab or PHYS 2225 Phys for Sci&Eng II Lab	1
<b>TOTAL Potential Credits Earned in High School</b>			<b>28</b>	<b>TOTAL Credits Required for Degree or Certificate</b>			<b>73.5</b>

**Note:** This is a regional agreement. Some classes and some concurrent enrollment agreements may not be available in your particular high school. See your individual school for specific program offering. **Note:** \*= concurrent ^= distant

**Note:** Requirements may change year-to-year. It is the student's responsibility to verify information by consulting with an SLCC department advisor.

**Note:** It is essential that students, while in high school, take as much mathematics, chemistry, physics and English as possible.

**Note:** This is designed to be a transfer degree to a university. Additional upper-division General Education courses will be required at the receiving institution. Regarding transferring from SLCC to a university program, students should consult with academic advisors at both institutions.